

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number  
**WO 2005/054806 A1**

(51) International Patent Classification<sup>7</sup>: **G01M 3/20**

(21) International Application Number:  
PCT/SE2004/001783

(22) International Filing Date: 2 December 2004 (02.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0303278-6 5 December 2003 (05.12.2003) SE  
2003-407157 5 December 2003 (05.12.2003) JP

(71) Applicant (for all designated States except US): **SEN-  
SISTOR TECHNOLOGIES AB** [SE/SE]; Box 76,  
Westmansgatan 49, S-581 02 Linköping (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **JENNEUS, Per**  
[SE/SE]; Ånestadsgatan 24, S-587 23 Linköping (SE).  
**ENQUIST, Fredrik** [SE/SE]; Blästadsgatan 138, S-589  
23 Linköping (SE).

(74) Agent: **STRÖM & GULLIKSSON IP AB**; Wallenbergs  
gata 4, S-583 35 Linköping (SE).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

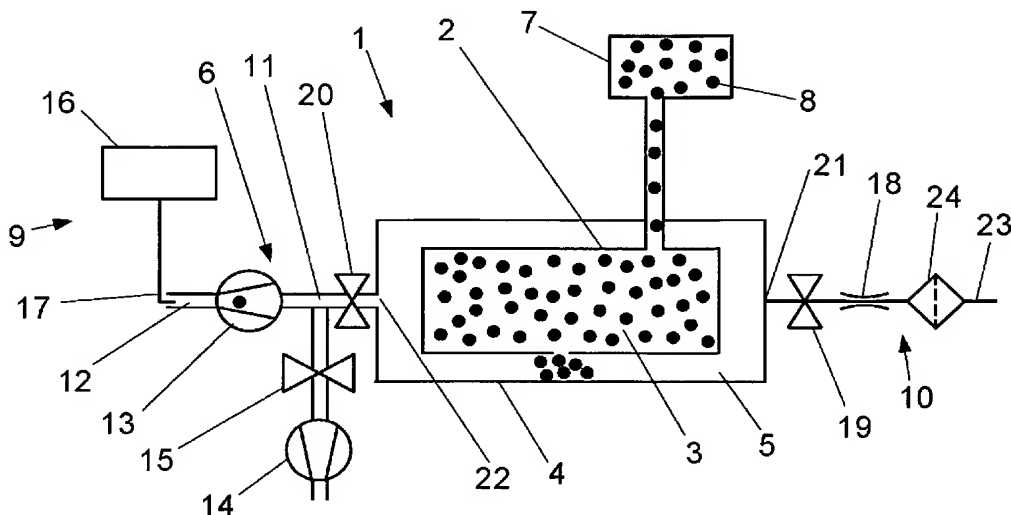
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR DETERMINING THE LEAKPROOFNESS OF AN OBJECT



(57) Abstract: The present invention refers to a system (1) and a method for determining the leakproofness of an object (2) having a first cavity (3). The system (1) comprises a closed chamber (4) having a second cavity (5) being arranged to envelope the object (2), evacuating means (6) for lowering the pressure inside one of the cavities (3, 5), supplying means (7) for supplying a tracer gas (8) into the one of the cavities (3, 5) rendered the higher pressure, detecting means (9) being sensitive to the tracer gas (8) and introduction means (10) for introducing a transport gas into the one of the cavities (3, 5) rendered the lower pressure. Furthermore, the evacuating means (6) is arranged to compress arriving gas to the ambient pressure of the chamber (4) and to communicate with the detecting means (9), which is suited for operation at the ambient pressure of the chamber (4). The tracer gas is hydrogen.

WO 2005/054806 A1